

## INFORMATION ASYMMETRIES, ISSUERS' INCENTIVES AND UNDERPRICING IN EMERGING MARKET : SOME EVIDENCE FROM TUNISIAN IPO FIRMS

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### ABSTRACT

This paper examines Initial Public Offerings (IPOs) that took place in an emerging market such as Tunisian Stock Exchange. On the basis of a sample of 53 companies that went public during the period 1994 – 2013, research results show that underwriters, who are involved in the firm as shareholders or as group's subsidiaries i.e. self-marketed IPOs, are likely to exert a dominant influence on the offer and market prices, thereby reducing the cost of underpricing. Moreover, according to the principles of mental accounting, Tunisian IPO firms are willing to accept large underpricing when the perceived wealth gain is greater than the cost of underpricing. Finally, we find significant support that Tunisian issuers and their underwriters use discounted offer prices by setting prices below that warranted by its intrinsic valuations, to entice the uninformed investors to take part in the offerings for the purpose of successfully IPO implementation.

**KEYWORDS:** Initial Public Offering, Information Asymmetries, Issuers' Incentives, Emergent Market, Self Marketed IPOs

**JEL Classification:** G32, G24

### INTRODUCTION

In some emerging markets, characterized by a small financial market and underdeveloped capital markets, Initial Public Offerings (IPOs) take place in a context of uncertainty and information asymmetry which leads to a significant level of securities' underpricing. Therefore, weakness and vulnerability of financial systems, lack of property right protection, larger state owned enterprises and smaller family firms centered on a principal owner-founder entrepreneur in developing countries (Hearn, 2011), provide a particular IPO underpricing puzzle.

A substantial body of empirical literature has attempted to explain IPO underpricing phenomenon in the developed stock market by information asymmetry between issuers and underwriters. This approach was advanced by Baron (1982) who suggests that the investment banker is better informed about the conditions prevailing in capital market than the issuer who cannot observe the distribution efforts by the banker. In order to resolve interest conflicts, the issuer optimally delegates the offer price decision to the better-informed banker and takes underpricing as compensation for underwriters in order to ensure the success of the IPO. Various empirical studies have been developed to test Baron's model and thereby the relevance and the significance of information asymmetry as a possible explaining of the IPO underpricing. However, there is a considerable emphasis on the empirical research (Muscarella and Vetsuypens (1989), Ljunqvist and Wilhelm (2003), Chen et al, (2010)) devoted to developed markets with little studies, if any, directed towards developing countries which are characterized by smaller capital markets and where imperfect information problem is most acute. Consequently, we intend to complement and extend previous empirical research by looking at the impact of asymmetric information problem (scale and scope) on IPO firm's implementation in developing countries. Tunisian Stock Exchange (hereafter TSE) is a fertile ground to test new theories of IPO underpricing and makes an interesting focus given

the fact that Tunisia is considered as a “new” emerging market according to The Economist (2011) and as a fast-growing Mediterranean emerging market (Lagoarde-Segot, 2013).

Using the initial public offerings of 38 investment banks that went public on New York Stock Exchange during 1970-1987 and participated in the distribution of their own securities, Muscarella and Vetsuypens (1989) had found that, contrary to the implication of Baron’s model, such self-marketed offerings are characterized by statistically significant underpricing comparable to that of other IPOs. However, on the basis of 2399 firms going public on the period 1996-2000, Ljungqvist and Wilhelm (2003) finding contrasts with the previous result to the extent that: if the investment banks are shareholders, it is not surprising that the interests are better aligned, the agency conflict should be solved and the underpricing must be lesser. They have shown a significant negative relation between investment bank ownership and initial returns, and this, whether or not the bank is involved in marketing and pricing the securities which in turn supports Baron’s model. Schenone (2004) have shown interesting results according to which firms with a pre-IPO banking relationship with a prospective underwriter face about 17% lower underpricing than firms without such banking relationship.

Recently, Chen et al (2010) have reviewed the validity of Baron’s model by using more recent data and incorporating new theories. To deal with the short coming of missing variables and incorrect inferences, new factors such as issuer incentives (Habib and Ljungqvist, (2001), Loughran and Ritter, (2002)) are found to be important for enhancing applied research focused on IPO underpricing. Using 52 firms from the US common stock IPOs over the period 1980-2003, Chen et al (2010) results show, that it is premature to reject Baron’s model of IPO underpricing when we take issuer incentives into account.

In response to the lack of empirical evidence of asymmetry information effect on the implementation of firm IPOs in developing countries, this paper is one of the first attempts to accomplish this task by using 53 firms going public on TSE over the period 1994-2013. It will focus on two related questions:

- How the Tunisian firms implement their IPO in a context of information asymmetries, uncertainty and relatively fast-growing stock market?
- How the underwriters involved as an ownership of issuer’s shares or as group’s subsidiaries – self-marketed IPOs – behave in the implementation of the offerings?

In order to address these questions, the rest of this paper is structured as follow: the next section outlines methodology detailing research hypothesis development as well as the underlying theoretical backgrounds, while section 3 provides econometric model specification and significance of the variables included on the model. Sample construction, regressions and results are presented in section 4 while the final section concludes.

## **HYPOTHESIS DEVELOPMENT AND RESEARCH DESIGN**

We find evidence that only consistent methodology with the specificities of developing stock market and the availability of data can be useful to perform significant analysis and particularly to examine how asymmetric information explain IPO underpricing in these countries. This methodology is built based on the mitigation of the previous studies dealing with Baron’s model tests and a set of new theories available for a first stage development of a new emergent stock market like TSE.

While much of the literature suggests asymmetric information between issuers and underwriters as a possible explanation of the IPO underpricing, not many empirical studies distinguish between self-marketed IPOs and

non-self-marketed IPOs as a proxy for information asymmetry. Indeed, since the IPO issuer underwrites its own shares, the problem of asymmetric information becomes totally superfluous because issuer and underwriter are the same. Thus, there is no need to use underpricing as compensation for the underwriter for the use of superior information. More generally, if the determinants other than information asymmetries cause IPO underpricing self-marketed should be less underpriced than non-self-marketed IPO (Muscarella and Vetsuypens, 1989). In the line of Chen et al (2010), we construct a dummy variable, *SELF*, equaling one when the IPOs are self-marketed and zero otherwise. However, in our sample, IPO is self-marketed when the going public procedure is provided by an underwriter involved in the firm as ownership of issuers' shares or as group's subsidiaries. In this case, the internal team and the external team in the IPO process are merged and the interests should be better aligned. The validity of the Baron's model suggests that the coefficient of *SELF* must be significantly negative in regression models. Consequently, we test the following hypothesis:

*H1: The level of self-marketed IPOs underpricing is less than that for non self-marketed IPOs since no information asymmetry and the related agency conflict should exist when firms underwriting their own shares.*

Moreover, issuer incentives would be relevant in developing countries context and can shed more light on the relation between companies and dealer-broker underwriters. Indeed, the pioneering works of Habib and Ljungqvist (2001) and Loughran and Ritter (2002) which could be considered as different attributes for enhancing Baron's model inferences in the context of informational asymmetries. While the first one is based on owners underpricing and promotion tradeoff determined by the minimizing of wealth losses, the second suggests the satisfaction of pre-issue shareholders.

According to Habib and Ljungqvist (2001), owners care about underpricing depends on how much they sell at the IPO. Owners who sell very few shares suffer only marginally from underpricing. Conversely, the more shares they sell, the greater is their incentive to decrease underpricing. It is within this framework that firms have a vested interest in keeping under control IPO process by increasing promotion cost which translates issuer's incentives to take benefits of reducing underpricing. The owners' participation in the offering and the magnitude of the dilution they suffer on retained shares are the key issues to test when we try to explain IPO underpricing in a developing stock market:

*H2: Underpricing decreases in promotion costs and in the participation ratio: the greater is the participation ratio and dilution factor, the greater are issuer incentives to control underpricing.*

The issuer's tradeoff between losses and wealth gains from going public is an important input for advancing the applied research in the emergent stock market. Interestingly, Loughran and Ritter (2002) have presented a prospect theory model according to which issuers will sum the wealth loss from leaving money on the table with the larger wealth gain on the retained shares from a price jump, producing net increase in wealth for pre-issue shareholders. Issuers would not show any apparent interest in controlling underpricing when the net perceived gain is positive i.e. the wealth gain is greater than the money left on the table. The mental strategy for complacency with IPO underpricing is called *integration* (Chen et al, 2010). Loughran and Ritter (2002) model's predicts that the coefficient of integration would be positive.

*H3: Pre-Issue shareholders would not resist to underpricing when wealth gain is greater than the money left on the table. Net wealth gain would be associated with more underpricing*

In the developing stock markets, high level of uncertainty plays a crucial role in IPO underpricing. As documented by in Beatty and Ritter (1986) and Rock (1986), uncertainty increases the extent of the adverse selection problem faced by uninformed investors. They consequently require a greater discount to be induced to take part in the offering. In this context, underpricing is used to decrease risk of not getting a fully subscribed IPO which increases with uncertainty.

**H4:** *firm's IPO underpricing increases with uncertainty*

The relation between market conditions and underpricing is a well-known result. Following Derrien and Womack (2003), it would be useful to take into account market return and market volatility as core explanatory variables representing market conditions. Keeping everything else constant, good market conditions improve the investor's sentiment and provides a large demand for IPO shares, which in turn leads to high IPO aftermarket price and then to larger initial returns. In fact, in a hot market the level of underpricing of IPOs may be significantly higher than in a cold market (Al-Hassan, 2007). As shown empirically by Menyah et al. (1995) and Paudyal et al (1998) market volatility may also determine the degree of underpricing: the more market volatility, the larger issuer's efforts to minimize the probability of unsuccessful IPO, the smaller price offer, the higher the level of IPO underpricing will be. This finding supports the following hypothesis:

**H5:** *IPO underpricing increases with market return and market volatility*

## VARIABLE DEFINITIONS AND REGRESSION MODELS

We test the above hypotheses using 53 firms floated on the Tunisian stock Exchange over the period 1994-2013, Data from different prospectuses and from the TSE official site, and cross-sectional ordinary least squares (OLS) regressions framed as follow:

$$IR_i = f(\text{Self}_i, \text{issuer incentives}, \text{uncertainty}, \text{market conditions}, \text{Time}, \text{error})$$

Where the dependent variable,  $IR_i$ , is the first-day return measured from offer price to closing market price and the determinants are three sets of variables : self, issuer incentives and control variables which could potentially explain the degree of underpricing (initial return) in developing stock market.

The descriptive statistics of the initial returns  $IR_i$  show that 7.5% of sample firms close strictly below the offer price and 20% close exactly at the offer price. The remaining 77% are underpriced with an average of initial return around 20.5%. These results provide a representative sample to check how IPO underpricing is explained in a developing stock market.

We consider as self-marketed issuer IPOs all floated firms whose underwriters (lead manager or co-manager) are involved in the capital as shareholders or as group's subsidiaries (table 1). *Self* is a dummy variable that takes the form of one if firm is affiliated to self marketed IPOs and zero otherwise. Within our sample 49% of firms going public are considered as self-issuer marketed IPOs with average first day initial return equal to 4.2% compared to 26.9% for the non- self marketed IPOs. This interesting evidence must be explored in our cross-sectional regressions to check its power of explanation for underpricing.

Issuer incentives are a set of variables that translate the firm's intention to control underpricing. *Participation ratio* is the proportion of original shares (secondary shares) sold in the IPO to shares outstanding pre-IPO. According to H2, the related coefficient would be significantly negative. *Dilution* is the ratio of primary shares sold in the IPO. In our sample, the purely primary offerings represent 32.1 % showing 22.1% average rate of underpricing. Purely secondary offerings are much more common, accounting for 33 of the 53 IPOs (62.2%) with a 12.4% average rate of underpricing. The remainder combines primary and secondary offerings. The latter component of issuer incentives vector is *integration* which is represented by a dummy variable with the value of one when the perceived wealth is greater than the money left

on the table<sup>1</sup> and zero otherwise. Meaningful statistics of this variable show that 40% of the firms in our sample have realized negative net wealth gains which is related to 2.2% rate of underpricing; therefore perceived wealth is greater than the money left on the table for 60% of firms which corresponds to 24.6% average of IPO underpricing.

To deal with valuation uncertainty of firms going public in the IPO pricing process in developing stock markets, we use control variable, *discount*, measured from the difference between average prices from the different evaluation methods and offer price divided by the average price. Indeed, in the IPO process valuation, the underwriters often employ multiple valuations to determine fair value of the firm going public, however all of these valuation methods suffer from a positive bias with respect to equilibrium market value (Roosenboom, 2012). This will lead to practise deliberate price discount for the purpose of reassuring and convincing investors and financial partners: the greater uncertainty, the more intentional price discount, the greater investor demand, the higher underpricing will be. Recently, empirical studies have documented that an increase in valuation uncertainty of IPO firms leads to steeper price discounts; therefore firms tend to be more underpriced (Nagata, (2013), Roosenboom, (2012)). Moreover, variable *discount* could be useful to test Baron's model (1982) and Rock's model (1986) where IPO underpricing should serve as an indirect form compensation for underwriters and uninformed investors. Following this analysis, the coefficient of *discount* would be significantly positive. To complete our analysis, the average market return over 30 trading days (*avret\_30*) of the floated share after the first day of listing. If rock's model hold, the coefficient associated to *avret\_30* could be significantly positive.

As documented by Habib and Ljungqvist (2001), we use logarithm of firm, *lage*, as a proxy for firm's ex-ante uncertainty. Age is expressed in years, and represents the number of years between founding and the IPO. The findings of Schenone (2004) have revealed that younger firms are more underpriced relative to older ones. As a result, it would be a significant negative relation between *lage* and IPO underpricing.

Market conditions are introduced in our regression models using two added variables (*ret\_20* and *sd\_20*), which are consecutively the buy-and-hold return and daily volatility of BVMT index 1994-2008 Tunindex (2009-2013) over 20 trading days before the IPO. The literature predicts (H5) that market return and volatility have a positive effect on underpricing.

Finally, since our sample covers 20 years and since underpricing has been shown to vary over time (Loughran and Ritter, 2004), time effect may well be another factor influencing IPO underpricing particularly in the developing countries where financial structural reforms have been continuously carried out. To control time effect, the period (1994-2013) has been subdivided into three sub-periods in accordance to the evolution of capital market reforms and financial legislation<sup>2</sup>. Therefore, we use three dummy variables *D94\_98*; *D99\_2008* and *D09\_2013*.

<sup>1</sup> According to Loughran and Ritter (2002), the *perceived wealth gain* =  $[(shares\ retained_i + secondary\ shares\ sold_i)(OP - midpoint) + shares\ retained_i(P - OP)]$  and the *money left on the table* =  $(P - OP)[secondary\ shares\ sold_i + primary\ shares\ sold_i]$ , where P is the first day closing price and OP offer price. For convenience, we assume that all shares of an IPO firm belong to a representative agent so all variables  $X_i = X$

<sup>2</sup> February 1969: Creation of Tunis Stock Exchange as public establishment. November 1994: Reorganization of the financial market which separates the functions of control and management of the Stock Exchange market. November 1995: Creation of the Tunis Stock Exchange, a limited company held by the brokers, 24 in total. October 1996: Set up of the trading electronic system NSC. December 1996 new accounting system was introduced where 15 accounting standards have been pronounced in line with International Accounting Standards Board (IASB). April 1998: Launching of the index TUNINDEX (Base 1000 in December 31, 1997). December 2007: Launching of the Alternative Market, for small and medium-sized companies, migration to the latest version of the electronic trading system V900. (source: Tunisia Stock Exchange)

## RESULTS

Table 2 reports the last-squares estimates of six models using White's (1980) heteroskedasticity adjusted standard errors, where the explaining variables are divided into three groups: self-marketed IPOs as dummy variable, issuer incentives and uncertainty. The first important report is that the explanatory power of the regressions is high ( $R^2$  in excess of 45%) which produces the percentage of change in initial return that is explained by regression, and the overall statistical significance of all models is quite well accepted ( $p(F \text{ statistic})=0.00$ ).

Our findings are consistent with Baron's and Lougran-Ritter's theory of underpricing. We find a strong relation between *Self* and underpricing and a support to H1. As shown in model (1), *Self* and the subperiod dummy variables alone can explain about 30% of the initial return variability with highly significance coefficients.

**Table 2: OLS Regression Models**

Variable	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model(6)
<i>Intercept</i>	30.7*** (0.000)	22.6** (0.010)	20.9** (0.020)	5.8 (0.25)	26.6*** (0.009)	6.94 (0.545)
<b><i>Self-marketed IPOs</i></b>						
<i>Self</i>	-19.9*** (0.000)	-14.2** (0.012)	-10.11** (0.013)	-7.56** (0.044)	-13.2** (0.016)	-7.98* (0.066)
<b><i>Issuers' incentives</i></b>						
<i>Intégration</i>			19.9*** (0.000)	25.9*** (0.001)		26.04*** (0.000)
<i>Participation</i>			-0.05 (0.83)		-0.35 (0.13)	-0.03 (0.877)
<i>Dilution</i>			-0.09 (0.74)		-0.29 (0.431)	-0.35 (0.264)
<b><i>Uncertainty</i></b>						
<i>discount</i>		0.005 (0.983)		0.77** (0.010)		0.73*** (0.009)
<i>Avret_30</i>		9.23** (0.022)			9.69** (0.010)	
<i>mret_20</i>		1.03 (0.846)				7.59 (0.198)
<i>sd_20</i>		-3.38 (0.579)				2.45 (0.678)
<i>Age</i>		-5.4** (0.578)			-5.39** (0.016)	-4.74 (0.126)
<b><i>Period dummies</i></b>						
<i>D94_98</i>	-14.6*** (0.001)		-16.7** (0.012)	-12.2*** (0.005)		
<i>D99_2008</i>		16.1*** (0.002)			18.*** (0.002)	15.7*** (0.009)
<i>D09_2003</i>		18.5** (0.010)			23.2* (0.071)	24.01*** (0.009)
<i>Adjusted-R<sup>2</sup></i>	0.30	0.42	0.42	0.50	0.45	0.52
<i>Prob F-Statistic</i>	0.00	0.00	0.00	0.00	0.00	0.00
<i>observations</i>	53	53	53	53	53	53

The sample selected consists of 53 firms going public on Tunisian Stock Exchange (TSE) over the period 1994-2013. The dependent variable in all regressions is the initial return,  $IR_i$ , measured by the difference between the first day closing price and offer to the offer price. *Self* is a dichotomous variable coded one "1" for self-marketed IPOs and zero "0" otherwise. All information required for the definition of the dummy variable, *self*, are hand-collected from IPO prospectuses. *Integration* is a dummy variable with the value one "1" when the

perceived wealth is greater than the money left on the table and zero "0" otherwise. *Participation* is the proportion of original shares (secondary shares) sold in the IPO to shares outstanding pre-IPO. *Dilution* is the ratio of primary shares sold in the IPO. *Discount* is average prices determined by different evaluation methods relative to the offer price. *Avret\_30* is the average market return over 30 trading days of the floated share after the first day of listing. *mret\_20* and *sd\_20* represents respectively average return over 20 trading days before first listing day of the securities and the market volatility measured by the standard deviation. *Age* is the logarithm firm's age measured by the number of years between founding date and the IPO date. *D94\_98*, *D99\_2008* and *D09\_2003* are subperiod dummy variables for, respectively the periods 1994-1999, 1999-2008 and 2009-2013. All regressions use White's robust standard errors to deal with heteroskedasticity problem. \*, \*\*, \*\*\* denote significance at 10%, 5% and 1% levels respectively. Numbers in brackets ( ) refer to the p-values

Furthermore, the coefficients of the variable *self* are negative and statistically significant in all the regression models which provide that information asymmetries can be considered as an important explaining factor of underpricing in a developing stock market such as TSE. Our findings in all regression models show that variable *self* remain significant and support the Baron's model. We can conclude that underwriters, who are involved in the firm as ownership of issuer's shares or as group's subsidiaries, are likely to exert a dominant influence on the offer and market prices.

Based upon the fact that the underpricing is a persuasive phenomenon that cannot be explained solely by information asymmetries between issuers and underwriters (Muscarella and Vetsupens, 1989), other variables have been added to check the effect of issuers' incentives and to control the uncertainty effect (model (2)) on the initial returns. The negative signs of *dilution* and *Participation* are not opposite to what we expect according to Habib and Ljungqvist's predictions but they are not significant which reject H2 hypothesis. However, *integration*, which proxies for pre-IPO shareholders' incentives, is a potential factor explaining the underpricing on the TSE. The remaining regression models (3-4-6) show a significant and positive relationship between *Integration* and underpricing at the 1% level which is consistent with H3: Tunisian IPO firms are willing to accept large underpricing when the perceived wealth gain is greater than the cost of underpricing. These results strongly support the hypothesis H2 and, consequently, the argument of Loughran and Ritter (2002).

As a result related to Tunisian IPO firms analysis, the high significance of *Self* and *Integration* as explanatory variables of the initial returns strain belief that information asymmetries and issuer's incentives might have worked hand-in-glove ( $R^2=42\%$ ) to determine the underpricing level. Indeed a self-marketed IPO with an eventually wealth losses provide strong reservations against underpricing.

Continuing this line of reasoning by including uncertainty, initial returns are inversely related to the log of the issuing firm's age which support that younger firms suffer greater uncertainty and allow for more underpricing. Moreover, the significant positive coefficients of *avret\_30* and *discount* variables provided by models (2), (4), (5) and (6) shed light on the prediction of Rock's model: to ensure successful offerings, Tunisian IPO firms price the shares below that warranted by its intrinsic valuation (discount) to entice the uninformed investors to take part in the offering and for the purpose of reducing the winner's curse of the informed investors. These results strain thinking that firm's IPO underpricing increases with uncertainty (H4). However market conditions represented by market return over 20 days before the first listing (*mret\_20*) and the related volatility *sd\_20* are not significant in explaining IPO underpricing, which reject the hypothesis H5.

By controlling time effect, it is not surprising that the first subperiod (1994-1998) is related negatively and significantly to underpricing while the remaining period corresponds to high level of initial return. The significant coefficient of *D94\_98* can be explained by the fact that on this period 83% of the firms going public are considered as self-marketed IPOs. Moreover as documented by Lagoarde-Segot (2013), in 1996 the banking system held about two-thirds of stock exchange capitalization and about 90% of the listed securities over this period. However, on the period

1999-2013, the non self marketed IPOs represents 68.6% of the firms going public and 61.1% have created wealth gain for shareholders greater than the cost of underpricing.

## CONCLUSIONS

This paper is one of the first to investigate how information asymmetries, issuers' incentives and uncertainty may work hand-in-glove to explain IPO underpricing in a developing stock market such as Tunisian Stock Exchange. However, we do not claim to be exhaustive and to be able to address all the emerging markets IPO Puzzle. Using 53 Tunisian firms that have gone public on the period 1994-2013 and regression models, this paper provides three main findings.

We conclude that underwriters, who are involved in the firm as an ownership of issuers' shares or as group's subsidiaries, are likely to exert a dominant influence on the offer and market prices, thereby reducing the cost of underpricing. In this line of reasoning, when underwriters have less information asymmetry and the interests are better aligned, it is not surprising that Self-marketed offerings are significantly less underpriced comparable to that of other IPOs which in turn supports Baron's model.

We also provide evidence on the impact of issuers' incentives on the underpricing level. More precisely, on the basis of mental accounting, Tunisian IPO firms are willing to accept large underpricing when the perceived wealth gain is greater than the cost of underpricing which is consistent with Loughran and Ritter's (2002) conjecture.

Whilst market imperfections, including information asymmetries and uncertainty, are the main features of the developing stock markets, we find significant support that Tunisian issuers and their underwriters apply an intentional price discount to their fair value estimate of IPO and set offer price below that warranted by its intrinsic valuation. This practice helps to entice the uninformed investors to take part in the offerings for the purpose of successfully IPO implementation. Thus offer price discounts are significantly associated with higher underpricing.

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## APPENDICES

**Table 1: Self – Marketed IPOs Selected from Prospectuses**

COMPANIE	FIRST LISTING	UNDERWRITER	INVOLVEMENT FIRM	INVOLVEMENT IPO
<b>ICF SOCIETE DES INDUSTRIES CHIMIQUES DU FLUOR</b>	27/05/1993	BDET capitalis	Shareholder	BDET capitalis is acting as the broker-dealer of BDET Bank which is one of the majority shareholders. BDET is the Lead manager in this IPO and selling shareholder with Arab National Bank (BNA Bank) and member of the Board of Directors ( p.3-6)
<b>AMS ATELIERS MECANIQUES DU SAHEL</b>	14/12/1994	STB capitalis	Shareholder	STB capitalis is acting as the broker-dealer of STB bank which is the majority shareholder with 99% of shares (p.5). STB capitalis is the Lead manager, and STB bank is the only selling shareholder.
<b>SFBT SOCIETE FRIGORIFIQUE&amp; BRASSERIE DE TUNIS</b>	09/06/1995	BDET capitalis	Shareholder	BDET Bank is one of the shareholders of SFBT with 5.05% of the capital. It is one of the selling shareholder with Arab National Bank (BNA), and member of the Board of Directors (p.1 -5)
<b>UIB UNION</b>	19/08/1996	I.N.I Intermédiaire	Group's	UIB held 52.4% of I.N.I's

<b>INTERNATIONALE DES BANQUES</b>		International	subsidiary	capital
<b>ALKIMIA SOCIETE CHIMIQUES ALKIMIA</b>	<b>22/08/1996</b>	BDET capitalis & Union de Gestion Financière	Group's subsidiary	UGF is the IPO Comanager and subsidiary of the "Union Bancaire pour le Commerce et l'Industrie" (UBCI) considered as shareholder with 33.08% of original shares and the principal selling shareholder (p.2)
<b>SIMPAR</b>	<b>08/01/1997</b>	BNA capitaux	Shareholder with 31.2% of the capital (p.12)	Lead manager, selling shareholder and member of the Board of Directors
<b>CIL COMPAGNIE INTERNATIONALE DE LEASING</b>	<b>17/02/1997</b>	FPG Financière de Placement et de Gestion	Group's subsidiary	FPG is the lead manager and subsidiary of the "Banque Internationale Arabe de Tunis" (BIAT) considered as a shareholder with 10% of CIL capital
<b>STAR SOCIETE TUNISIENNE D'ASSURANCE ET DE REASSURANCE</b>	<b>14/08/1997</b>	BDET capitalis & Maxula bourse	Group's subsidiary	BDET capitalis is the IPO Comanager and subsidiary of Société Tunisienne des Banques STB considered as shareholder of STAR with 5.17 % of the capital(p.12)
<b>ATL ARAB TUNISIAN LEASE</b>	<b>19/12/1997</b>	BNA Capitaux & Arab Financial Consultants(AFC)	Shareholders	BNA capitaux and AFC are respectively brokers-dealers related to BNA bank and ATB bank. STB bank and ATB bank hold respectively 10% and 28.79% of ATL's capital (p.13)
<b>AMEN LEASE</b>	<b>30/12/1997</b>	BDET CAPITALIS & Amen Invest	Shareholder	Amen invest is the IPO Comanager. It is broker-dealer of the Amen Bank which held 60% of the capital (p.7)
<b>SOTETEL SOCIETE TUNISIENNE DE TELECOMMUNICATION</b>	<b>12/06/1998</b>	BDET Capitalis	Shareholder	BDET bank held 12.5% of SOTETEL capital and it is one of seller shareholders (6.71% of the initial offering)) (p.3-8)
<b>SOTUV1 SOCIETE TUNISIENNE DE VERRERIES</b>	<b>27/01/1999</b>	BDET Capitalis	Shareholder	BDET capitalis is the lead manager. BDET Bank held 14.45% of SOTUV's capital and it is one of the main seller shareholders with 14.25% of the offered shares.
<b>SOTUMAG1 SOCIETE TUNISIENNE DE MARCHES DE GROS</b>	26/04/1999	BNA Capitaux	Shareholder	BNA Capitaux is the Lead manager. BNA Bank holds 10% of SOTUMAG's capital
<b>ATTIJARI LEASING</b>	06/08/1999	Cofib-Capital & Sud Invest	Shareholder	Sud Invest is the Comanager in Attijari leasing's IPO. It is related to "Banque du Sud". BS bank, seller shareholder, held 29.4% of the original before IPO and 20.58 % after the IPO.
<b>MAG MAGASIN GENERAL</b>	09/11/1999	BNA capitaux & SOFIGES	Shareholder	BNA Bank, lead manager and member of the Board of Directors, held 34.19% of MAG's capital (p.9)
<b>SOTUMAG2</b>	21/08/2000	BNA capitaux	Shareholder	BNA Bank, IPO lead manager,

<b>SOCIETE TUNISIENNE DE MARCHES DE GROS</b>				seller shareholder and member of the Board of Directors, held 9% of MAG's capital and 0% after IPO (p.4)
<b>STIP SOCIETE TUNISIENNE DES INDUSTRIES DE PNEUMATIQUES</b>	28/01/2002	Cofib-Capital Finances	-	It is particular IPO where the principal seller shareholders are STB Bank (3.61%), STUSID Bank (1.17%), BTKD Bank (0.8%) and BNA Bank (0.5%) which represent 60.8% of the offered shares in the IPO (p.4)
<b>ELWIFAK</b>	10/07/2006	SOFIGES	Shareholder	SOFIGES is the lead manager and the shareholder with 2.5% of the Elwifak's capital. It is a subsidiary of STB bank which held 11.38% of the original shares. SOFIGES and STB bank are not seller shareholders
<b>ESSOKNA SOCIETE IMMOBILIERE ET DE PARTICIPATIONS</b>	18/09/2006	BNA capitaux	Group's subsidiary	ESSOUKNA firm was created in November 1983 on the initiative of SIMPAR which is subsidiary of BNA Bank (p.1) The SIMPAR is held directly up to 30.3% by the BNA Bank. (p. 33)
<b>SOPAT SOCIETE DE PRODUCTION AGRICOLE DE TEBOULBA</b>	31/12/2007	Mac SA & SICOFI	Group's subsidiary	SOPAT is an agri-food firm owned by Lahmar family who holds 91% of that SOCOFI's share capital. SICOFI is the Comanager in this IPO.
<b>SERVICOM</b>	25/06/2009	Axis Capital & Arab Financial Consultant	Group's subsidiary	Arab Financial Consultant is the broker-dealer of ATB bank which held, via Arab Tunisian Development (ATD-SICAR), one of its subsidiaries, 38.07 % of the servicom's capital before IPO and 21.93% after the IPO (p.29). ATD-SICAR is one of the seller shareholders in the Servicom's going public.
<b>SALIM INSURANCES</b>	25/04/2010	SIFIB-BH	shareholder	The BH Bank group (Banque de l'Hatitat, SIM-SICAR, Modern leasing and the lead manager underwriter SIFB-BH) hold 57.99 % of SALIM's Capital (p.41). The capital shares are owned up to 30% by BH bank, 13.99% by Epargne invest, 9.33% by SIM-SICAR, 2.33% by Modern leasing and 2.33% by the lead manager SIFB-BH.(p.58)
<b>TUNIS-RE INSURANCE</b>	11/05/2010	BNA capitaux	shareholder	BNA bank held 20.89% of Tunis-RE's capital before IPO and 16.25 % after IPO (p.26). BNA is one of the seller shareholders
<b>NAKL AUTOMOBILES</b>	12/07/2010	Attijari intermédiaire	Group's subsidiary	Attijari finance is acting as financial advisor to Ennakl which held 2.62% of Attijari Bank's capital. "Attijari intermédiaire", lead manager of

				this IPO, is acting as broker dealer of Attijari bank. (p.150)
<b>MODERN LEASING</b>	0.1/12/2010	SIFIB-BH & Arab Financial Consultant	Shareholder	Modern leasing is a subsidiary of BH Bank group which held up to 74% of the original shares: 47.14% by BH bank, 11.86% by “Epargne Invest SICAF”, 8% by SALIM insurance and 7% by SIM-SICAR p.86)